



Industrial Telecommunications Association, Inc.

December 9, 1999

Thomas J. Sugrue, Esq.  
Chief, Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW, Room 3-C252  
Washington, DC 20554

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DEC - 9 1999

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Re: Private Wireless Band Managers – WT Docket 99-168

Dear Mr. Sugrue:

During the course of the above-captioned proceeding, the Industrial Telecommunications Association, Inc. (ITA), as well as several other commenting parties, expressed its strong support for service rules that would ensure that a portion of the 746-806 MHz band is made available for the private wireless industry. Specifically, ITA seeks an allocation of 6 MHz of spectrum immediately adjacent to public safety spectrum for private wireless use.

### **I. Band Manager/Lessee Eligibility.**

To satisfy the Congressional mandate that this spectrum be assigned via competitive bidding, ITA supports the creation of a band manager(s) to bid on the 6 MHz of spectrum at auction. The band manager(s) would then make the spectrum available, via contract, to private entities exclusively.

ITA has been asked to clarify how it would define “private wireless users” for the purpose of disaggregating the spectrum, if an allocation strictly for private wireless use were to be made. ITA proposes to define “private wireless users” as: (1) those entities which own and operate a wireless telecommunications system solely to meet their internal wireless communications needs; and (2) a third party entity which owns, operates, and/or manages a wireless telecommunications infrastructure to meet the internal communications needs of a private wireless entity but whose infrastructure is not interconnected to the public switched network..

ITA would include in its definition of “private wireless users” private carriers (*i.e.*, “third part entities”) as well as strictly private internal users for several reasons. Private carriers promote a higher level of spectrum efficiency by customizing a communications systems to meet the individual needs of the private internal user, if that user does not wish to construct and

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operate their own internal system. While these entities *do* receive compensation for their services, these systems are *not* offered to the general public, but instead are offered only to meet the internal communications needs of a specific private internal licensee or group of private internal licensees. The availability of this system enables a potential private wireless internal user to develop customized communication applications that otherwise would not be available and enhances employee safety, operational efficiency, and productivity.

## **II. Interconnection Authority.**

ITA does not propose to place a restriction on interconnection for the private internal licensee using the system solely to meet their internal communication needs; this is consistent with rules and policies currently in place at the Commission. In order to sustain the integrity of the allocation strictly for private wireless use, ITA, as a band manager, would not, however, permit private carriers (*i.e.*, third party entities) to interconnect.

## **III. Private Wireless Spectrum Justification.**

As ITA has demonstrated in the past, many businesses in this country use private wireless systems to ensure the safety of their employees and enhance their productivity and operations while also contributing the continued growth and vibrancy of the American economy. Such businesses include, but are not limited to, the agricultural, airline, land transportation, utility contracting, automobile emergency, overland trucking, construction, chemical, manufacturing, ranching, energy exploration, forest products, mining, and telephone maintenance industries. As a direct result of the use of these private wireless systems, the private wireless industry provides the American public with a plethora of goods and services such as safe transportation, efficient shipment of goods, building supplies, plentiful food products, and a safe water supply.

While the private wireless industry provides an incredibly valuable service to the American public, it has done so without the benefit of a new spectrum allocation since 1986. Instead, it has seen the gradual erosion of private wireless spectrum for commercial uses. In the absence of an allocation, what has further harmed the private wireless industry is the fact that the Commission reallocated the 800 MHz General Category pool for commercial use. Moreover, prior to the intercategory sharing freeze, SMR and "enhanced" SMR applicants significantly penetrated the private pool frequencies further converting even more frequencies for commercial use. The 6 MHz of spectrum currently sought in the 746-806 MHz band represents less spectrum than that lost in the General Category pool. By allocating this 6 MHz of spectrum for private wireless use, the Commission can begin to redress some of the spectrum lost by the more than 3,450 non-commercial licensees operating systems in the General Category pool.

As a result of the Commission's "commercialization" of private wireless spectrum, the private wireless industry is now in dire need of additional spectrum. As an FCC-certified frequency advisory committee, ITA can attest that, in at least the top 200 metropolitan areas,

there are no channels available for assignment in the 800 MHz and virtually no channels in the top 50 markets in the 900 MHz bands.<sup>1</sup>

The 450-470 MHz band contains the last channels available for assignment; and there is only a limited amount of spectrum remaining in that band. In fact, license assignments in the 450-470 MHz band are shared resulting in very intensive use of this spectrum; the 450-470 MHz band houses over 200,000 private wireless licensees. Consequently, it would be virtually impossible for a private wireless licensee to secure a trunked radio system in the top 15 cities in the 450-470 MHz band. Last May, ITA was asked by the Department of Justice, in an unrelated matter, to determine whether any trunked radio systems were available in the 450-470 MHz band in the top 15 cities in the United States. ITA conducted a 2-step analysis: whether any trunked systems with a 25 kHz bandwidth were available and whether any trunked systems with a 12.5 kHz bandwidth were available in the top 15 markets. The results revealed that there would be no channels available for a system with a 25 kHz bandwidth and only one channel available – in Denver, Colorado – for a system with a 12.5 kHz bandwidth. While an allocation of 6 MHz would not satisfy all of the spectrum needs of the private wireless industry, it would certainly be one step towards meeting the critical spectrum needs of an often overlooked community.

#### **IV. Spectrum Use/Disaggregation Rights of Private Internal Bidder.**

ITA has also been asked how much spectrum it believes a private internal user who elects to bid for the 6 MHz of spectrum at auction should have to use in its internal system before being permitted to disaggregate the remainder. As ITA has stated before, communications are not the core competency of most, if not all, private wireless licensees. As such, ITA does not believe that many private wireless licensees would elect to participate in this auction. Certainly if a private internal user elects to participate, one could anticipate that they would have some intent of using at least some portion of the spectrum for their own internal system. However, the actual portion needed for the own internal system would be difficult to quantify; much would depend on the size of the licensee and their spectrum needs. Nevertheless, ITA maintains that the number of private internal users participating in this auction would be negligible.

#### **V. Private Wireless/Public Safety Sharing.**

One of the obstacles facing the Commission is the potential for interference with the newly-allocated public safety spectrum. ITA maintains that allocating the 6 MHz of spectrum in the 746-806 MHz band immediately adjacent to the public safety spectrum for private wireless use would alleviate many of the Commission's interference concerns. Private wireless licensees and public safety licensees have cooperated to avoid interference and maximize the efficient use of the spectrum in our existing bands for decades. Some examples of this spectrum sharing include: in the 450-470 MHz band, private wireless and public safety licensees share frequencies for fixed purposes on a secondary non-interference basis; at 470-512 MHz, private wireless and public safety licensees operate on adjacent channels; and at 800 MHz, private wireless and

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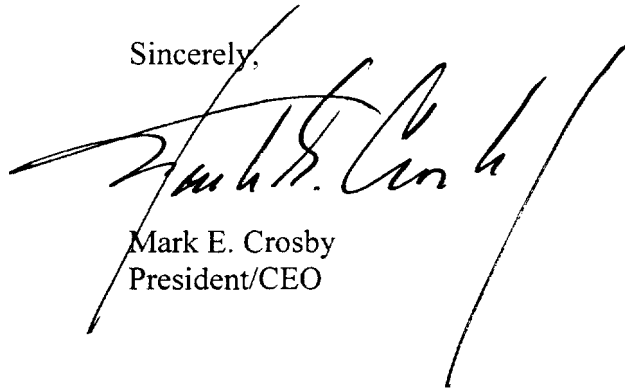
<sup>1</sup> See also In the Matter of An Allocation of Spectrum for the Private Mobile Radio Services, Petition for Rule Making Submitted by the Land Mobile Communications Council, RM-9267, filed April 22, 1998 (LMCC Petition) at Appendix B.

public safety operate together within the non-commercial pools where inter-pool sharing of frequencies was routinely permitted prior to the imposition of the inter-pool freeze. In addition, virtually all other private wireless bands have both industrial/business/transportation licensees operating adjacent to public safety licensees. The frequency advisory committees have been able to "coordinate around" public safety systems maximizing the use of the spectrum, while protecting the public safety systems from harmful interference. This arrangement has worked well in our existing bands and ITA can see no reason why an adjacent allocation in the 746-806 MHz band would not also work.

\* \* \* \* \*

ITA looks forward to continued discussion on these issues in order to help the Commission serve the private wireless user community. Please call if we can answer any questions on these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Crosby", is written over a large, stylized, handwritten "1" that extends from the signature down towards the typed name.

Mark E. Crosby  
President/CEO

cc: Diane Cornell, Esq.  
Ari Fitzgerald, Esq.  
Kathleen Ham, Esq.  
Adam Krinsky, Esq.  
Gary Michaels, Esq.  
Mark Rubin, Esq.  
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